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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,913	09/29/2003	Petros Belimpasakis	915-010.008	2083
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WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER CHEEMA, UMAR	
			ART UNIT 2144	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,913

Applicant(s)

BELIMPASAKIS, PETROS

Examiner

Umar Cheema

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/29/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 09/29/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Software, *per se*:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

2. Claims 16-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1- 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al. (Takagi) (US Patent # 6,091,733).

Regarding claim 1, Takagi discloses a method for a communication device which communication device comprises a first software application and which communication device communicates with a network by using a layered protocol stack comprising a transport layer (see abstract, col. 3, lines 50-59; first and second transport layer protocol data units in a communication device/method system; also figure 2), the method comprising: providing a second software application at the same communication device, wherein the second software application implements a transport layer proxy between the first software application and the network (see col. 1, lines 66-67, col. 2, lines 1-15, figure 2; second transport layer protocol data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Regarding claim 2, Takagi discloses the method of claim 1, wherein the communication device communicates with the network via an air interface (see col. 3, lines 50-59, figure 2 (IF interface_500,510)).

Regarding claim 3, Takagi discloses the method of claim 1, wherein the method comprises accessing a remote server by establishing: (i) a local transport layer connection between the first software application and the second software application, and (ii) a further transport layer connection between the second software application and the remote server (see col. 4, lines 45-57, col. 9, lines 32-39).

Regarding claim 4, Takagi discloses the method of claim 3, wherein the local transport layer connection and the further transport layer connection are client-server based connections (see col. 8, lines 22-25; figures 9-10; communication between server terminal and client terminal).

Regarding claim 5, Takagi discloses the method of claim 1, wherein the second software application acts as a proxy for the first software application and provides at least one additional service for the first software application or for the user of the device (see col. 6, lines 9-17).

Regarding claim 6, Takagi discloses the method of claim 5, wherein the provided

additional service comprises selecting a network interface to be used in the case where more than one network interface is available (see col. 2, lines 5-15).

Regarding claim 7, Takagi discloses the method of claim 5, wherein the provided additional service comprises selecting a bearer for crossing an air interface (see col. 3, lines 50-59, figure 2).

Regarding claim 8, Takagi discloses the method of claim 7, wherein the bearer operates in the protocol stack on a layer lower than the transport layer (see col. 6, lines 9-17).

Regarding claim 9, Takagi discloses the method of claim 6, wherein the selection of a network interface or a bearer is performed based on information which comprises at least one of the following: network availability, user-defined rules, time, location, cost (see col. 6, lines 20-25; time period required for transmitting the segments).

Regarding claim 10, Takagi discloses the method of claim 5, wherein the provided additional service comprises providing a network interface not natively supported by an operating system of the device (see col. 1, lines 66-67, col. 2, lines 1-4).

Regarding claim 11, Takagi discloses the method of claim 5, wherein the provided additional service comprises providing support for multiple users (see col. 1, lines 38-40; server to clients).

Regarding claim 12, Takagi discloses the method of claim 11, wherein support for multiple users is implemented via a set of predefined user profiles (see col. 5, lines 63-67).

Regarding claim 13, Takagi discloses the method of claim 5, wherein the provided additional service comprises receiving information indicative of a change in a remote server address and modifying the remote server address at the communication device by the second software application, whereby no modification in the first software application is needed (see col. 4, lines 45-57, col. 9, lines 32-50).

Regarding claim 14, Takagi discloses the method of claim 1, wherein the first software application is an e-mail client, web browser or another end-user application (see col. 1, lines 10-16, figure 1).

Regarding claim 15, Takagi discloses the method of claim 1, wherein the transport layer is implemented by TCP (Transmission Control Protocol) (see col. 4, lines 4-6, figure 3; TCP relay unit).

Regarding claim 16, Takagi discloses a communication device which comprises a first software application and which communication device is configured for communication with a network by using a layered protocol stack comprising a transport layer (see

abstract, col. 3, lines 50-59; first and second transport layer protocol data units in a communication device/method system; also figure 2), the communication device further comprising: a second software application at the same communication device, wherein the second software application is configured to implement a transport layer proxy between the first software application and the network (see col. 1, lines 66-67, col. 2, lines 1-15, figure 2; second transport layer protocol data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Regarding claim 17, the limitations of this claims has already been addressed (see claim 2 above).

Regarding claim 18, the limitations of this claims has already been addressed (see claim 3 above).

Regarding claim 19, the limitations of this claims has already been addressed (see claim 4 above).

Regarding claim 20, the limitations of this claims has already been addressed (see claim 5 above).

Regarding claim 21, the limitations of this claims has already been addressed (see

claim 6 above).

Regarding claim 22, the limitations of this claims has already been addressed (see claim 7 above).

Regarding claim 23, the limitations of this claims has already been addressed (see claim 8 above).

Regarding claim 24, the limitations of this claims has already been addressed (see claim 9 above).

Regarding claim 25, the limitations of this claims has already been addressed (see claim 10 above).

Regarding claim 26, the limitations of this claims has already been addressed (see claim 11 above).

Regarding claim 27, the limitations of this claims has already been addressed (see claim 12 above).

Regarding claim 28, the limitations of this claims has already been addressed (see claim 13 above).

Regarding claim 29, the limitations of this claims has already been addressed (see claim 14 above).

Regarding claim 30, the limitations of this claims has already been addressed (see claim 15 above).

Regarding claim 31, Takagi discloses a system comprising a communication device and a network, which communication device comprises a first software application and which communication device is configured for communication with the network by using a layered protocol stack comprising a transport layer (see abstract, col. 1, lines 10-15, col. 3, lines 50-59; first and second transport layer protocol data units in a communication device/method system; also figure 2), the communication device further comprising: a second software application at the same communication device, wherein the second software application is configured to implement a transport layer proxy between the first software application and the network (see col. 1, lines 66-67, col. 2, lines 1-15, figure 2; second transport layer protocol data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Regarding claim 32, Takagi discloses the system of claim 18, wherein the communication device is configured for communication with the network via an air

interface (see col. 3, lines 50-59, figure 2 (IF interface_500,510)).

Regarding claim 33, Takagi discloses a software application executable in a communication device, which communication device comprises another software application and which communication device is configured for communication with a network by using a layered protocol stack comprising a transport layer (see abstract, col. 1, lines 10-15, col. 3, lines 50-59; first and second transport layer protocol data units in a communication device/method system; also figure 2), the software application comprising: program code for implementing a transport layer proxy between said another software application and the network (see col. 1, lines 66-67, col. 2, lines 1-15, figure 2; second transport layer protocol data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Regarding claim 34, Takagi discloses the software application of claim 33, wherein the software application is a computer program product stored on a medium (see col. 4, lines 36-44).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see the form PTO-892 (Notice of Cited Reference) for a list of more relevant prior arts.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umar Cheema whose telephone number is 571-270-3037. The examiner can normally be reached on M-F 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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